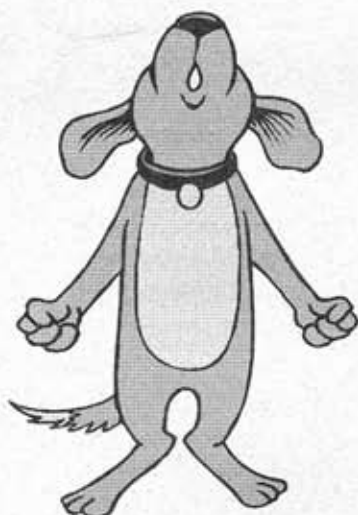


MILK RIVER WATERSHED NEWS

New Milk River Storage Project In Alberta: One Canadian's Perspective

By Ken Miller



As recently as last March I teetered on the verge of trading the whole Milk River country for a big yellow dog and then shooting him. This country sure can change in short order. The protracted drought and concomitant water

shortages may be abating — but only till next time. Tree ring studies in the Cypress Hills and Bearpaws indicate even more severe drought has occurred in the 1880's and 1790's. Consequently, here in Alberta we are revisiting twenty-year old studies for a water management storage project about twelve miles west of the town of Milk River.

THE PROBLEM: ALBERTA PERSPECTIVE

In dry years as much as 90% of the water flowing past the town of Milk River is St. Mary diversion water returning to Montana. This overactive flow results in turbidity, scouring, and cut banks that slump about six inches per year. It's tough on fisher people and the storage capacity in Fresno. More importantly, municipal water supplies for Coutts/Sweetgrass, Milk River, and several rural water co-ops are faced with low reserves of water in the winter months that leave little room to manage emergency water use such as fire suppression. Because we have no water storage facilities on the Alberta side, a moratorium restricting irrigation to the existing 5,000 acres was imposed in the mid-80's. Pumping has been stopped in mid-July in recent years. On average about 40,000 acre-feet of

"Canadian" spring freshet is passed unused to Fresno Reservoir annually. With a Canadian water storage facility, about 15,000 new acres of irrigation could be developed — resulting in a forceful and sustainable positive impact on our basin's economy.

THE PROBLEM: A MONTANA PERSPECTIVE

Involvement with the MRIA has evolved my thinking of the basin as a whole natural system without the kryptonite effects of the International Boundary. What I see in Montana is not pretty — mostly the 110,000 acre Montana system has been rode hard and put up wet. Especially major components of the St. Mary diversion system which are deteriorating and just plain old. Fresno is a quarter silted in and irrigation water is in short supply about half of the time. Evolution to higher valued and better paying crops than barley and alfalfa will not happen without a secure supply of fall irrigation water. A forage based feedlot industry, seed pota-

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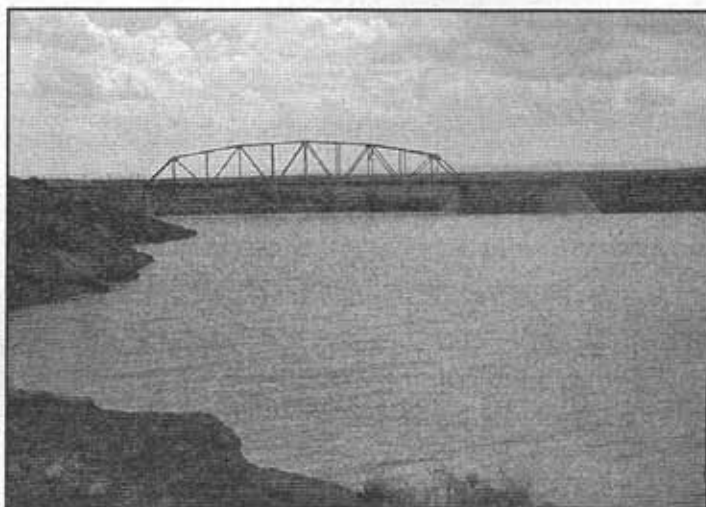
Coordinator's Corner.....Page 6

Early June Rains Should Save This Irrigation Season

By R. Scott Guentbner, Bureau of Reclamation

Prospects for a good water supply looked grim last fall when reservoir storage was extremely low. Things did not improve over the winter with lower than normal precipitation and moderate temperatures. Water managers and water users had been commiserating over the poor water supply outlook even into early June. Fortunately, our crystal balls aren't always that clear. The cool months of March, April and May stalled off crop growth and thus the need for irrigation water. Even with that good luck we prepared for a tough season of water delivery.

Montanans have often said that one of the beauties of the state is the ever-changing weather. Boy, can it change! And that change often affects our streamflows and, ultimately, water supply. That's what happened as a result of the June 8 through June 11 rainstorms across northcentral Montana. Actually, from a water manager's perspective, I think of two distinct benefits from that timely rainfall, what happened upstream of Fresno Reservoir and what happened in the irrigated valley downstream. Rainfall upstream of Fresno Reservoir, in Alberta, was



Compare this picture of the spillway at Fresno, taken in June, to the picture below, taken in March.

reported to be in excess of 8 inches at some locations. Fortunately, this was a relatively steady rainfall and much of this moisture soaked into the dry soil and subsoil. Even with the dry soil, inflows to Fresno Reservoir were at a record or near record peak. Total inflow during June was the highest of any month since Fresno Reservoir was constructed in 1939. This large inflow filled Fresno Reservoir by June 15, the first time Fresno Reservoir has been filled since 1997. Less rain fell, seemingly in decreasing amounts from Havre towards Glasgow. This rain satisfied the water demand by the crops, and excess flow in the Milk River was used on lands that most thought wouldn't receive irrigation water this year.

Lake Sherburne near Glacier Park is essentially full and Fresno Reservoir was near full at the beginning of July. This should provide water users with a near-normal water supply for the remainder of the irrigation season. Water conservation efforts should continue even with the seemingly good water supply. Remember, this is Montana! ✓



Compare this picture of the spillway at Fresno, taken in March, to the picture above, taken in June.

Heart of the Highline Tour Scheduled for September

The Milk River International Alliance, in cooperation with Hill, Blaine, Phillips and Valley County Conservation Districts, are sponsoring "The Heart of the Hi-Line Tour" on September 11 & 12. The actual tour will begin at Fresno Dam and conclude in the Glasgow Irrigation District. The tour will focus on irrigation project structures and practices, with some recreation and municipality interests. The special attraction will be a panel discussion entitled "Sustaining Flow in the Milk River, the Lifeline of the Hi-Line" with representatives from the following: Senator Conrad Burns, Senator Max Baucus, Representative Denny Rehberg, Governor Judy Martz, Alberta Provincial Government, and US Bureau of Reclamation. There will be a registration fee that will cover all the meals. For registration forms, stop by any of the Milk River Conservation District offices.

Negotiating Reserved Water Rights For Bowdoin National Wildlife Refuge

By Joan Specking

In June 2002, the Montana Reserved Water Rights Compact Commission (Commission) and the U.S. Fish and Wildlife Service (FWS) met to discuss federal reserved water rights for Bowdoin National Wildlife Refuge near Malta. The Commission and the FWS have finalized compacts for three of the six National Wildlife Refuges with federal reserved water rights in Montana: Benton Lake, Black Coulee and Red Rock Lakes. The three remaining Refuges are Bowdoin, Charles M. Russell/UL Bend National Wildlife, and the National Bison Range.

The 15,551-acre Bowdoin National Wildlife Refuge was established by presidential executive order in 1936 as a refuge and breeding ground for migratory birds and other wildlife. The Refuge includes an island nesting complex attracting pelicans, cormorants and blue herons, as well as many other species of water birds. Recently, the Refuge received designation as a Western Hemisphere Shorebird Reserve Network site; one of two in Montana. Close to 50,000 shorebirds have been documented on the Refuge, including 38 different species. The diversity of birds and waterfowl draws the interest of schools, birdwatchers, tourists and hunters, among others.

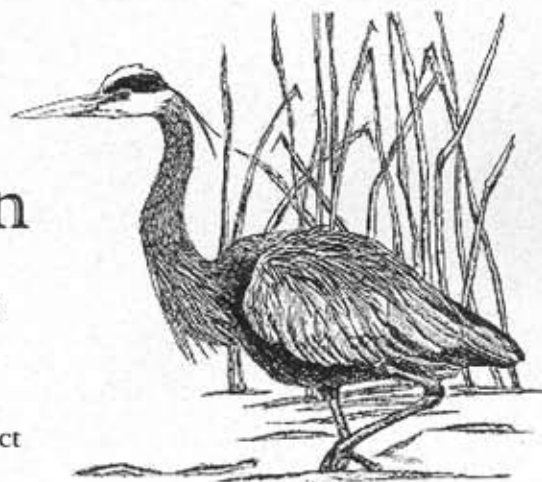
Bowdoin was a topic of discussions in 1999 when negotia-

tors were working on a compact with the Gros Ventre and Assiniboine of the Fort Belknap Reservation. At the time, the negotiating parties considered the proximity of Bowdoin to the Milk River Project and discussed problems with salinity in the area and mitigation options including: whether water could be brought into Bowdoin from Nelson Reservoir if a pump-lift from the Milk River was built; increasing deliveries from Dodson Canal; and diverting flood flows from Beaver Creek. All of these possibilities would require FWS to develop a discharge plan meeting State Department of Environmental Quality water quality standards, and preventing downstream irrigators from receiving an excessive amount of salt in their irrigation water.

Summary of the FWS Preliminary Proposal for Bowdoin Federal Reserved Water Rights

The FWS proposal for Bowdoin generally mirrors the status quo for the Refuge. Valid existing State-based water rights will be protected in the affected watersheds. A summary of the FWS proposal for Bowdoin follows:

- The right to store water to spillway or management level in all existing Refuge pools.
- The right to develop addi-



tional flow through ponds in small drainages entering the main impoundments, using groundwater, local runoff or delivered water.

- The right to 15 acre-feet of groundwater for Refuge headquarters use and the right to develop an additional 8 acre-feet of groundwater for future use at this or a nearby site.
- The right to develop an amount of groundwater (not yet specified) for wildlife and stock use if supplemental water is needed.
- The right to develop 200 acre-feet of groundwater within the Black Coulee drainage for wildlife use when surface flows are insufficient.
- Black Coulee provides up to 5,000 acre-feet annually to the Refuge. Irrigators on Black Coulee have water rights senior to the FWS. The FWS would like the basin to be closed to new uses.
- The right to the continued beneficial use of natural Beaver Creek flood flows through development of diversion facilities permitting diversion of up to 14,000 acre-feet whenever there are surplus water conditions. FWS

(Continued on Page 7)

toes dry beans, and alfalfa seed to name a few could put some chickens back in New Deal pots. On a positive note, rationalizing the eight districts into the Joint Board of Control, as well as improvements on-farm and district management practices, have gone a long way to improve the efficiency of water utilization.

The MRIA is committed to tasks outlined in a Federal 319 grant to perform a water quality data inventory and assessment as part of a local effort to develop a basin management plan and thereby accommodate the Federal Clean Water Act. Resolution of reserved water right claims, along with the Compact Commission's mitigation process, will likely exacerbate ongoing water deficiencies in the lower basin.

Both sides of the border have a problem with the outward migration of capital, but our most serious problem in my view, is that our most vital resource — a large part of our younger generation (usually the best ones) are forced to leave to find jobs. This will kill us in the long run.

SOLUTIONS

Reflecting back on nearly fifty harvests that I have participated in, it never ceases to amaze me the gardening, butchering and other terrible work involved in subsistence prairie living. I often wonder at the courage and the grit that it took our grandparents to stay here a hundred years ago. There was nothing — no towns, no trees or schools, no hospitals or things in general. But there was freedom — even if it was to fail, but mostly there was the strong belief that every one of those home-stead shacks was a manifestation of a bright future for that family. Look ahead, not back.

One solution to our problem of eroding infrastructure, rural depopulation and missed economic opportunities imposed by water shortages would be to do nothing. Those pioneers would not be impressed.

There are a number of technical solutions to enhancing and securing water supplies in the basin. Rehabilitation of the St. Mary diversion system is necessary including increasing the canal capacity, but at great cost. The Nelson Reservoir lift pump is being looked at as a partial solution. Inter-basin

transfers from the Missouri or Tiber have also been looked at but are also very expensive. Naturally any project would require extensive economic and environmental evaluations.

Spurred on by the recent drought, there has been a revival of Alberta interest in a water management project (dam). A medium size reservoir could address Canadian concerns regarding municipal water, recreation and provide secure water for both existing and new irrigation. It seems to me that the maximum sized impoundment, at a cost of about an additional 15 million dollars, could provide considerable benefit to the lower basin residents in the form of multi-year storage from high runoff years and also to extend the delivery season of St. Mary water from the usual 120 days now, to nearly year round, thereby solving problems with supply limitation, scouring, fishing and municipal water flows.

THE FUTURE

Public awareness of the magnitude and urgency of the problem is only a beginning. Make no mistake rehabilitation of our basin water resource is not a one shot fix. The process is both complex and ongoing as befits any living organism. Identifying and quantifying alternative sources and selecting the most appropriate solution will be a formidable task. A broad-based, basin-wide, proactive political constituency needs to be assembled to convince state/provincial/federal/International Joint Commission officials to get onside, all at the same time. Talk about ducks in a row.

One very positive thing going for us is our history of object lessons. The nearly one hundred year-old Spite Ditch that was constructed just west of the town of Milk River to demonstrate that the St. Mary diversion water could be recaptured and diverted back to Canada (checkmate). This project ended unceremoniously in a pasture twelve miles from the weir — it failed. What did succeed was a pragmatic and formal sharing of the Basin's water resources through the Boundary Water Treaty of 1909 and subsequent Apportionment Order of 1921. Only through cooperative efforts can the basin residents perpetuate our oasis culture. Our pioneer ancestors prevailed over more formidable obstacles. ✓

Ken is a 3rd generation farmer/rancher from the Milk River, Alberta area.

Representatives on the Milk River JBC:

Kay Blatter	Chairman	Fort Belknap Irr. Dist.	Casey Kienenberger	Member	Malta Irr. Dist.
Hugh Brookie	Vice-Chairman	Malta Irr. Dist.	Ralph Snider	Member	Harlem Irr. Dist.
Melvin Novak	Secretary	Glasgow Irr. Dist.	Bruce Anderson	Member	Paradise Valley Irr. Dist.
Lee Cornwell	Member	Glasgow Irr. Dist.	Brad Tilleman	Member	Zurich Irr. Dist.
Jack Gist	Member	Alfalfa Valley Irr. Dist.	Floyd Blair	Member	Dodson Irr. Dist.

North Central Regional Feasibility Study Update

By Brent Esplin, Bureau of Reclamation

In December 1999, Congress authorized the Bureau of Reclamation to begin the North Central Regional Feasibility Study. The intent of the Study, as outlined in the authorizing legislation, is "to evaluate water and related resources in North-Central Montana...to determine...how those resources can best be managed and developed to serve the needs of the citizens of Montana." The study area under consideration is the Milk, Marias, and St Mary River Basins.

The goals of the Study include identification of potential mitigation measures in support of settlement of Federally reserved water rights in the basin and identifying water, environmental, recreational, and other related needs in the basin. Federally reserved water rights in the basin include those associated with the Blackfeet, Rocky Boys, and Fort Belknap Indian Reservations and the Bowdoin National Wildlife Refuge.

The January 2001 edition of this newsletter contained an article, titled Feasibility Study Looks at Milk River Mitigation Alternatives, which outlined the alternatives currently under consideration for mitigation of the Fort Belknap Reserved Water Right Compact. The Study is also looking at potential mitigation measures of the Bowdoin National Wildlife Refuge and Blackfeet Indian Reservation Reserved Water Right Compacts if and when the respective parties negotiate them.

In June 2001, Reclamation, in

cooperation with the Milk River Joint Board of Control initiated a canal efficiency study to assess the need and potential benefits of measures related to the Milk River Project canal conveyance system and the river system. Results for the canal efficiency study will be used to update parameters in the Hydrology model. This will assist in the determination of benefits associated with efficiency improvements to the conveyance system and improving the operation of the Milk River Irrigation Project. This study is entering its second year. With the improved water supply we are able to collect data over a longer period of time and in different conditions compared to last year's drought mode.

Evaluation of the proposed Nelson Pumping Plant continues to go forward. We are currently evaluating the appropriate size for the pumping plant to make to

most efficient use of the Milk River's water supply in a cost-effective manner and to make better use of Nelson Reservoir to meet the Project's needs. A value engineering study was completed that evaluated the different alternatives and associated cost.

Reclamation's Geology Group recently completed their assessment of foundation conditions on the St. Mary Canal system and at new potential dam sites. The foundation assessment is used as an early indicator of the suitability of potential dam sites to determine their cost effectiveness to construct or modify existing structures. Foundation drilling was completed at two sites Peoples Creek, located on the Fort Belknap Indian Reservation, and Nelson Reservoirs proposed upper dike dam site.

Reclamation is utilizing HYDROSS as the hydrology model to evaluate the impacts to



Goldstone Bridge crosses the Milk River approximately 15 miles north of Fresno Reservoir and lies about half way between Fresno and the Canadian Border. The river was about a half mile wide at this location, flows peaked around 14,000 cfs at the Eastern Crossing, an all time high.

the way the system is operated and benefits of each of the alternatives identified by the Study. As alternatives are identified they are compared to a baseline condition that represents current conditions for evaluation. For the purpose of the Study, the present condition assumes failure of the St Mary Canal system so the basin is operating exclusively on Milk River water to meet needs of the Reservations, municipalities, agriculture, recreation, and environmental concerns.

For the past couple of years, Reclamation has worked with interested parties to assess fishery information in the Study area. Of

particular interest are the bull trout in the St. Mary Drainage. The Bull trout were recently listed as a threatened species under the Endangered Species Act. An entrainment study at the St. Mary Canal Headworks was set up this spring with the intent of collecting baseline data prior to the installation of an experimental electronic fish barrier this fall. Collection of baseline data was hindered by the high St. Mary flow as a result of the late spring snowstorm and the canal being shut off so emergency repairs could be made to the canal. Collection of baseline data will resume once the canal is opera-

tional.

Recent information has come available on genetic sampling of bull trout in this basin as well. Testing has shown that the fish from Kennedy Creek (which is below the St. Mary Diversion Dam) are very similar genetically to fish from Boulder Creek (above the dam). This shows that these fish have functioned in the past as one population, which supports the data that has been collected showing movement of bull trout between these two drainages and emphasizes the need for passage over the diversion dam.

On the Milk River, this spring provided a good opportunity to

(Continued on Last Page)

Coordinator's Corner

By Jim Thompson

Congress passed the Clean Water Act in 1972 to make our water "fishable and swimmable." In 1987 Congress added Section 319 to the CWA that addresses non-point source (NPS) pollution. As part of Section 319, states were required to assess their water bodies for NPS impairments, develop NPS management plans, implement those plans, and report plan implementation to the EPA. One of the things included in the plan is Total Maximum Daily Loads (TMDL). A TMDL is the total amount of a pollutant, per day, that a waterbody may receive from any source without exceeding the state water quality standards.

The Milk River was listed as an impaired stream. What does that mean? It means a plan will be made using a watershed approach to voluntarily implement Best Management Practices (BMPs) to restore and protect our water from NPS pollution. Who's making these plans? Montana Department of Environmental Quality (DEQ) attempts to find partners to develop and implement plans such as federal, state and local agencies, as well as private groups and volunteers. The EPA has taken leadership in several watersheds throughout Montana. Fortu-

nately, I feel the Milk River, through the MRIA, Conservation Districts, Irrigation Districts, working with local, state and federal agency personnel have been given the opportunity to determine to great extent just what the potential of the Milk River is and how it should be managed.

I, as project coordinator, have taken this thing to heart, and with local guidance and direction, will work hard to pull it all together. By court order, all Montana waters are required to develop TMDLs by May 5, 2007, so we have the time to do it right.

I ran into my old friend who raises geese along the Milk River the other day. I found him working on his tractor and he said the geese were happy but then his tractor broke down; if it isn't one thing it's another. I watched him for awhile, his knuckles bleeding and sweat soaking his shirt. He finally sat down and said, "You know Jim, you need the right tool to get the job done right, plus it makes the work a lot more enjoyable." I said, "I agree, but a little WD 40 never hurts either."

Jim

will agree to subordinate its rights to valid existing State-based rights in return for a prohibition on new on-stream storage and new irrigation from direct Beaver Creek diversions.

Should the U.S. Bureau of Reclamation (BOR) construct a reservoir on Beaver Creek as part of the rehabilitation of the Milk River Project, the prohibition on new storage could be modified to exempt it in return for an allocation of water to Bowdoin.

- An unquantified right to divert water for firefighting purposes.

Milk River Project Water

The Refuge was originally part of the Milk River Project managed by the BOR, however, the FWS now has sole jurisdiction. The FWS contributed to the construc-

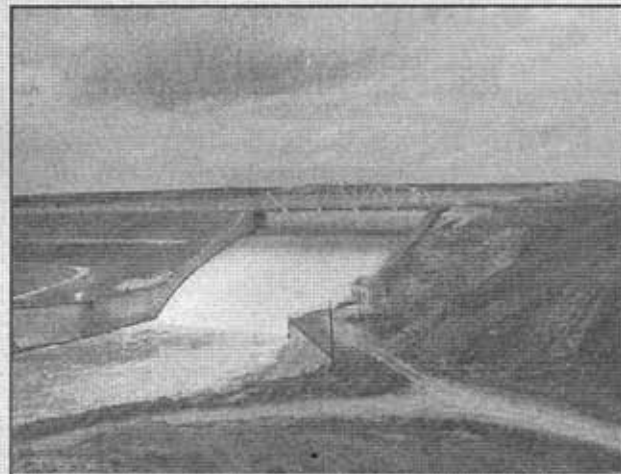
tion of Fresno Reservoir and as a result they receive 3,500 acre-feet per year of Milk River Project water, subject to irrigation demands. In addition, the Refuge has an 8,000 acre-foot State-based water right use claim from the Project, for water excess to irrigation needs. This water right claim was filed with the concurrence of the BOR. The claim amount was based on several years of very high deliveries from the Project. The FWS would like to pursue additional deliveries from the Project in the future. The FWS Project water is not part of the FWS federal reserved water right.

The FWS and the Commission are continuing to do technical evaluations of the Bowdoin proposal. The FWS will develop a more specific proposal for Beaver Creek and will work on a water discharge plan. The Commission has asked the FWS to consider

two of the proposals for improvement of the Milk River Project: the proposed Nelson pump-lift mitigation alternative, and the repair of the Dodson Canal and diversion dam, which is the main source of Project water to Bowdoin. The Commission considers these proposals beneficial to both the Project and to the Refuge. The FWS and the Commission will schedule a negotiating session for later this fall, and will talk to water users in the area about their concerns. If people would like to be on the Commission mailing list for future negotiating sessions and public meetings, please send your name and address to: RWRCC, 1625 11th Avenue, P.O. Box 201601, Helena, MT 59620-1601, email: rwrc@state.mt.us or call (406) 444-6841. ✓



Debris behind gates at Dodson Dam.



Fresno spilling as it reached its peak on June 18th, with 18 inches of water going over the spillway. This is the first time Fresno has filled since 1997.

If you have ideas for articles or news items, please contact:

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(Feasibility Study Update Continued from Page 5)

do some fish sampling with a high pulse of water as the late spring snow storm's runoff worked its way down the river. Preliminary results show large, benthic fish of the Missouri River utilizing the lower section of the Milk River below the Vandalia Diversion Dam. Species such as adult paddlefish and blue suckers were found in the section below Vandalia Diversion Dam to the confluence with the Missouri River. Sampling of larval fish performed during and immediately after the high flow will be analyzed this fall to determine what species used the Milk for spawning.

Reclamation will publish and make available a complete list of the current alternatives under consideration, complete with the estimated

cost, benefits, impacts, etc. of each of the impacts in a Alternative Scoping Document scheduled for release to the public in the fall of 2002. Public meetings will be scheduled this fall to discuss the alternatives with the public and solicit comments on the identified alternatives. The Alternative Scoping Document is a work in progress and will be updated as needed as additional alternatives are identified.

From the list of alternatives we will select the most promising alternatives for further refinement. Public input will be key in the selection of alternatives that are moved forward.

If you have specific questions, please feel free to contact Brent Esplin, the Feasibility Study Team Leader, at 406.247.7489 or by e-mail at besplin@gp.usbr.gov. ✓

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